

Amendments To Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A method for injecting a liquid drug containing a live cell to maintain biological activity of the live cell, comprising the step of:

A) injecting the liquid drug containing the cell contained in an injector into a subject at a predetermined range of velocity wherein the predetermined range of velocity is at least about 1 ml/min, and is less than, or equal to about 20 ml/min.

2-3. (Cancelled)

4. (Original) A method according to claim 1, wherein the predetermined range of velocity is less than about 10 ml/min.

5. (Cancelled).

6. (Previously Presented) A method according to claim 1, further comprising the step of:

B) accelerating the liquid drug containing the cell at a predetermined range of acceleration to reach the predetermined range of velocity.

7. (Previously Presented) A method according to claim 6, wherein the predetermined range of acceleration maintains a biological activity of the cell.

8. (Original) A method according to claim 6, wherein the predetermined range of acceleration is in the range of about 1 mm/sec² to about 15 mm/ sec².

9. (Original) A method according to claim 1, wherein an inner diameter of a body of the injector is about 1 mm to about 30 mm.

10. (Original) A method according to claim 1, wherein an inner diameter of a tip tube of the injector is about 0.1 mm to about 1 mm.

11-13. (Canceled)

14. (Previously Presented) A method according to claim 1, further comprising the step of:

C) decreasing a velocity of the liquid drug containing the cell at a predetermined range of acceleration to substantially zero.

15. (Original) A method according to claim 14, wherein the absolute value of an acceleration of the decreasing velocity is in the range of about 1 mm to about 15 mm/sec².

16. (Previously Presented) A method according to claim 1, wherein the injection is carried out for treatment of a heart disease.

17. (Currently Amended) A method for treating ~~an organ~~ a subject in need thereof using a liquid drug containing a live cell to maintain the biological activity of the live cell, comprising the step of:

A) Injecting the liquid drug containing the cell contained in an injector into a subject at a predetermined range of velocity wherein the predetermined range of velocity is at least about 1 ml/min, and is less than, or equal to about 20 ml/min.

18-42. (Cancelled).

43. (New) A method according to claim 1, wherein said biological activity is cell survivability.

44. (New) A method according to claim 1, wherein said biological activity is cell proliferation ability.

45. (New) A method according to claim 1, wherein said cell is used for regeneration and/or implantation.

46. (New) A method according to claim 1, wherein the predetermined range of velocity prevents the cell from damage caused by injecting force.

47. (New) A method according to claim 17, wherein the predetermined range of velocity is less than about 10 ml/min.

48. (New) A method according to claim 17, further comprising the step of: B)

accelerating the liquid drug containing the cell at a predetermined range of acceleration to reach the predetermined range of velocity.

49. (New) A method according to claim 48, wherein the predetermined range of acceleration maintains a biological activity of the cell.

50. (New) A method according to claim 48, wherein the predetermined range of acceleration is in the range of about 1 mm/sec^2 to about 15 mm/sec^2 .

51. (New) A method according to claim 17, wherein an inner diameter of a body of the injector is about 1 mm to about 30 mm.

52. (New) A method according to claim 17, wherein an inner diameter of a tip tube of the injector is about 0.1 mm to about 1 mm.

53. (New) A method according to claim 17, further comprising the step of: C) decreasing a velocity of the liquid drug containing the cell at a predetermined range of acceleration to substantially zero.

54. (New) A method according to claim 53, wherein the absolute value of an acceleration of the decreasing velocity is in the range of about 1 mm to about 15 mm/sec^2 .

55. (New) A method according to claim 17, wherein the injection is carried out for treatment of a heart disease.

56. (New) A method according to claim 17, wherein said biological activity is cell survivability.

57. (New) A method according to claim 17, wherein said biological activity is cell proliferation activity.

58. (New) A method according to claim 17, wherein said cell is used for at least one of regeneration and implantation.

59. (New) A method according to claim 17, wherein the predetermined range of velocity prevents the cell from damage caused by injecting force.